

NEW BEES AND WASPS, Part XX

By TARBTON RAYMENT, F.R.Z.S.*

Tasmania is not rich in indigenous bees, and many of the species are recorded from the southern littoral of Victoria. A recent survey of the 138 known species of bees of Portland showed that 24 were present in the island state. None of the bees could fly unaided across the hundred odd miles of water now forming Bass Strait, so one concludes that these must have penetrated to Tasmania before its separation from the mainland. A land connexion existed during the Permian Period, when Gondwana included portions of America, Africa, Asia, Australia and Tasmania. (See map Carnegie Institution of Washington and Schuchert's Historical Geology.)

It was, therefore, with no little interest that the author discovered a new species in a small collection of bees from the Great Lake district. The insects were taken on a species of "Everlastings", by a life-member of the Victorian Field Naturalists Club, Victor Miller. The new bee is a small black species, conspicuous for its excessively large, wide head. Though placed in the genus *Hylaenus* it is not typical and will probably be separated when more is known about it and the other sex is available for study. The species is dedicated to the memory of the late Blanche Miller, who contributed so much to the success of the Field Naturalists Club during her long association with its members.

While endeavouring to determine whether this strange specimen had any relatives in Victoria the author noticed particularly a specimen of *Euryglossa* taken at Lake Hattah, Victoria, by the late E. J. Dixon, another old and respected member of the Club. This too is small and black but is distinguished by its excessively long narrow head. The contrast between the two bees is so striking that the author has prepared a text-figure to illustrate these characters. The Tasmanian species is referred to *Hylaenus*, with certain reservations, as the author feels that it approaches the bees from Lake Hattah, which must be referred to *Euryglossa*. However, the illustrations will ensure the easy identification of both species, and the specific descriptions are included hereunder.

Family COLLETIDAE

Paracolletes obscuripennis Ckll.

Three fine males, considerably larger than specimens from Launceston, and having more of the smoky-coloured hair on head, thorax and abdomen; the tegulae are black, (red in type); the median tarsi are bright-red, the others are blackish. Great Lake, Tasmania, on flowers of *Helichrysum* sp.; February 6, 1953; leg. Victor Miller.

A series of smaller males, some with the apical segments of the flagellum excavated. Launceston, Tasmania, on flowers of *Bursaria spinosa*; January 2, 1938; leg. T. Gunton.

A series of males, not typical, being much smaller. Bolgart, Western Australia, on flowers of *Hakea* sp.; August 20, 1949; leg. Rica Erickson.

EURYGLOSSA DOLICHOCEPHALA, sp. nov.

Female—Length 5.5 mm. approx. Black.

Head excessively long, bright, a very delicate sculpture; face-marks nil; frons with scattered large shallow punctures; clypeus brighter, the punctures larger; supraclypeal area impunctate, a fine groove reaching the median ocellus; vertex with a few pale hairs; compound eyes excessively long, subreniform; genae with sparse punctures, a few white hairs; labrum blackish, a long narrow oval; mandibulae with a subapical amber patch;

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antennae short, segments of flagellum wider than long, light ferruginous beneath.

Prothorax with short appressed white hair; tubercles have a light spot, and a fringe of white hair; mesothorax minutely tessellate; scattered shallow punctures; scutellum and postscutellum similar to mesothorax; metathorax truncate, a delicate tessellate sculpture; abdominal dorsal segments blackish, somewhat suffused with amber, posterior margins more or less pallid, scattered punctures, a minute lineolate sculpture, a few pale hairs at apex; ventral segments similar.

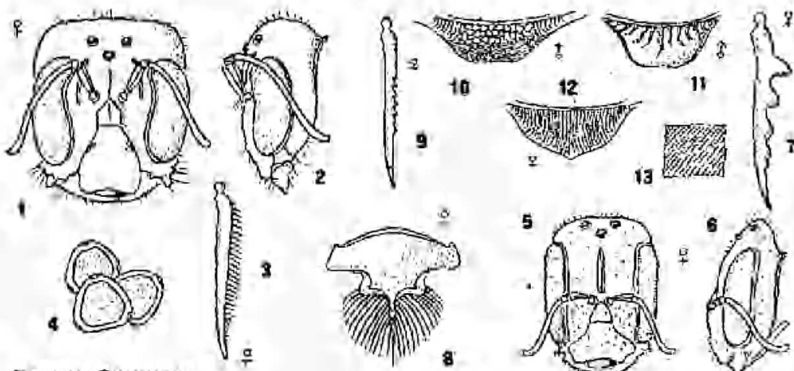
Legs brownish, with knees and tibiae amber; sparse white hair; the posterior pair somewhat spiculate basally; tarsi amber, each with a fine ctenidium; claws amber; hind calcar amber, with four or five rounded teeth; tegulae pallid, dull; wings iridescent, hyaline; nervures dilute sepia, basal arched and far short of nervulus; cells normal for the genus; pterostigma palest-amber, dark-margined; hamuli five, weakly developed.

The male is smaller, 4 mm., but otherwise similar to female.

Locality—Lake Hattah, Victoria; leg. E. J. Dixon.

Type and allotype in the collection of the author.

Allies: *E. goodeniac* Ckll., which has black nervures and a wide head. The new species is easily known by the excessively long head.



TARLTON RAYMENT

HYLAEUS BLANCHAE, sp. nov.

Type Female—Length 6 mm. approx. Black, oily-bright.

Head excessively large, quadrate, resembling that of certain *Megachile*, almost nude; face microscopically striate, a rare white hair here and there; frons with minute punctures between the lines; clypeus flat, with more numerous deeper punctures between the striae; supra-clypeal area with striae more conspicuous, and a fine sulcus reaching the median ocellus, which it encircles; vertex very long, with the striae converging to the ocelli; compound eyes very long; facial foveae narrow, but deeply incised, and following the pattern of the striae; there is a slight emargination of the eyes near the base of the foveae; genae excessively large, a few more white hairs; labrum black; mandibulae black, bidentate; malar area large, striate; antennae black, submoniliform, obscurely brownish beneath.

Prothorax produced laterally to a tubercle, otherwise depressed against the mesonotum, a few more white hairs; tubercles ivory (the only pale mark on the body); mesothorax depressed along a conspicuous median sulcus; an excessively delicate close tessellation; many microscopic shallow punctures; a few white hairs; scutellum and postscutellum similar to meso-

thorax; pleura shining, with a delicate tessellation; metathorax with an area enclosed by a very fine line; the whole finely tessellate, with a few white hairs laterally; abdominal dorsal segments with a microscopic cancellate lincation; the hind margins depressed and narrowly lighter, a few loose white hairs; more shining ventral segments similar.

Legs black, slender, knees ivory, clearest on posterior pair, a few white hairs; tarsi blackish; claws bifid, reddish, very small, hind calcar amber, finely serrated; tegulae black, sculptured with a fine tessellation, shining; wings dark; nervures blackish, both recurrens received by the second cubital at equal distances; basal arched as in *Euryglossa* and reaching nervulus; second cubital cell small, contracted at top; pterostigma conspicuous, blackish; hamuli four or five, very weak.

Locality—Great Lake, Tasmania, taken on *Helichrysum* sp.; February, 1953; leg. Victor Miller.

Type in the collection of the author.

Allies: Not near to my described species. It appears to stand between *Hylaeus* and *Euryglossa*, and structure suggests some relationship to *Euryglossa dolichocephalus*, sp. nov. *H. hobartianus* Ckll. has a large head, but the area of the metathorax is different, being closely punctured; and *H. blanchae* cannot be the female of it.

Family HALICTIDAE

Halictus bassi Ckll.

One male, not quite typical. Great Lake, Tasmania, on flowers of *Helichrysum* sp.; February 6, 1953; leg. Victor Miller.

Halictus baudini Ckll.

A large robust female, almost certainly the allotype, which can be recognized from the description of the male. Great Lake, Tasmania, on flowers of *Helichrysum* sp.; February 6, 1953; leg. Victor Miller.

Allotype in the collection of the author.

Halictus boweni Ckll.

A male, not quite typical. Great Lake, Tasmania, on flowers of *Helichrysum* sp.; February 6, 1953; leg. Victor Miller.

Halictus confusellus Ckll.

One female, typical in all characters. Launceston, Tasmania, on flowers of *Eursaria spinosa*, January 2, 1938; leg. T. Gunton.

One female, typical. Great Lake, Tasmania; February 6, 1953; leg. Victor Miller.

Halictus disclusus Ckll.

A series of females, which appear to be the undescribed sex, and one will therefore become the allotype should a pair be taken in cop. The black head and thorax, and pale-ferruginous abdomen give these bees a striking aspect.

Great Lake, Tasmania, on flowers of *Helichrysum* sp.; February 6, 1953; leg. Victor Miller.

Halictus granulithorax Ckll.

One female, typical in all characters, New Norfolk, Tasmania, on "Everlastings"; January 12, 1952; leg. Vivienne Gibson.

Halictus inclinans Sm.

Two females, rather small, with black legs. Great Lake, Tasmania, on *Helichrysum* sp.; February 6, 1953; leg. Victor Miller.

Professor Cockerell thought that the larger *H. subinclinans* Ckll. with light-red legs, was the mainland form, but the author has both species from Tasmania.

Halictus subinclinans.

Typical females. Launceston, Tasmania; leg. T. Gunton.

Family APIDAE

Apis mellifera, Linn.

Three workers, small and very black indeed, and therefore unlike the mainland hive-bee, which has now a strong infusion of yellow "blood" from *A. ligustica* Spin., giving it a tan or orange-coloured band on the abdomen. Great Lake, Tasmania; February 6, 1953; leg. Victor Miller.

Key to Text-block

Hylaeus blanchae, sp. nov.—1. Front of large head-capsule of female; 2. Lateral view of same showing excessive development of vertex and genae; 3. Finely serrated hind calcar of female; 13. Fine striate sculpture of frons.

Euryglossa dolichocephalis, sp. nov.—5. Front of head-capsule of female; 6. Lateral view of same showing the long frons and narrow genae; 7. The coarsely dentate hind calcar.

Halictus discoloratus Cldl.—8. Labrum appendage of female; 9. The hind calcar finely serrated only on the middle portion; 4. Pollen grains from the insect.

Sculpture of dorsum of metathorax—10. of *Halictus basati*; 11. of *H. boreani*; 12. of *H. hordini*.

AUTUMNAL FLOWERING OF SPICULAEA HUNTIANA

By W. L. WILLIAMS

Baron von Muller, the publisher of this intriguing little orchid, records it as an autumn flowering species, his specimens having come from Mount Tingiringi, New South Wales. Much later (1917) A. B. Braine discovered *S. huntiana* at Cravensville, Victoria, and for many years it was known in this State from that locality only. The flowering time was said to be November-December, by both E. E. Pescott and Dr. R. S. Rogers, in *The Victorian Naturalist* of 1926 (Vol. XLIII, Nos. 6 and 8). Rogers wrote: "I notice that its author, Baron von Muller, refers to it as an autumnal plant, but all plants received by me from Cravensville (and they have been fairly numerous) bloomed in November and December."

It is to be remarked that more recent publications (e.g. *Wildflowers of Victoria*, Jean Galbraith, with orchid section by Winifred Waddell) mention January as the flowering month. I recall Mr. A. J. Swaby telling me that he had found numerous specimens in bloom near Healesville early in the New Year—I think in January, only a few years ago.

On April 5th, this year, I came across one six-flowered specimen and another seven-flowered one near Foster's Lookout, Blackwood. Both were somewhat past their best, the two or three lowest flowers on each being partly withered, though all parts were perfectly recognizable. In only one bloom had the delicate labellum shrivelled entirely and dropped off. The majority of the flowers were fresh and in very good condition. It would be quite safe to say that a week earlier (or a fortnight at the most) the plants would have been perfect specimens—that is to say, they had been in full bloom somewhere between the 20th and the 31st of March. If the good Baron's first specimens chanced to be of this kind there would seem to be every reason for his recording *S. huntiana* as autumn flowering. (On the previous day, for instance, I had found *Eriochilus cucullatus* and *Pterostylis parviflora*).

In any case, records now seem to indicate that over the State as a whole *S. huntiana* may be in flower from November to the end of March. I am not sure enough of my ground to claim the record in flower spans for this interesting little orchid, but it must come very close to it.

[The late W. H. Nicholls once commented that he had records of the Hyacinth Orchid, *Dipodium punctatum*, flowering during each month of the year.—Editor]